UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
Port Orchard, Washington 98366

QUALITY ASSURANCE MEMORANDUM FOR ORGANIC CHEMICAL ANALYSES

Date: October 17, 2016

To: Helen Bottcher
USEPA Region 10

FROM: Dana Walker, Chemist
Office of Environmental Assessment, US EPA Region 10 Laboratory

SUBJECT: Quality Assurance Review for the percent lipids Wyckoff Eagle Harbor Clam Tissue

Project Code: WEH-021C
Account Code: 2016T10P302DD210S1LA00

CC: Cathy Martin, USACE

The following is a quality assurance review of the data for percent lipids analysis of samples from the above referenced site. The analyses were performed by the EPA Region 10 Laboratory ESAT contractor using EPA Region 10 Laboratory methods SW-846 3541/ SOP Or_P009A.

This review was conducted for the following samples:

16274200	16274201	16274202	16274203	16274204	16274208
16274209	16274210	16274211	16274212	16274213	16274214
16274216					

1. Data Qualifications

Comments below refer to the quality control specifications outlined in the Laboratory's current Quality Assurance Manual, Standard Operating Procedures (SOPs) and the Quality Assurance Project Plan (QAPP). No excursions were required from the method Standard Operating Procedure.

The quality control measures which did not meet Laboratory/QAPP criteria are annotated in the title of each affected subsection with "*Laboratory/QAPP Criteria Not Met*".

For those tests for which the EPA Region 10 Laboratory has been accredited by The NELAC Institute (TNI), all requirements of the current TNI Standard have been met.

2. Sample Transport and Receipt

All samples were received and met requirements for the analysis of percent lipids.

3. Sample Holding Times

The concentration of an analyte in a sample or extract of a sample may increase or decrease over time depending on the nature of the analyte. The holding time maximum criteria applied for the extraction of frozen tissue samples is one year from the time of collection. Extracts have a holding time maximum of 40 days from the time of preparation. All samples were extracted and analyzed within these criteria.

4. Sample Preparation

Samples were prepared according to the method/SOP.

5. Blank Analysis

Procedural blanks were prepared with the samples to show potential contamination from the analytical procedure. The results from the blank analysis are required to be less than the minimum reporting limit (MRL). The procedural blanks did not contain a detectable percentage of lipids.

6. Duplicates

Duplicate sample analyses are performed to provide information on the precision, in the matrix of interest, of the analytical method. All percent lipids results that were above 5 times the MRL were within the 20% relative percent difference criteria.

7. LCS/LCSD Analyses

Analysis included Laboratory Control Samples and duplicates, which was an NIST SRM 1946 Fish Tissue standard. All results were within the expected recovery criteria.

8. Data Qualifiers

All requirements for data qualifiers from the preceding sections were accumulated. Each sample data summary sheet and each compound was checked for positive or negative results. From this, the overall need for data qualifiers for each analysis was determined. In cases where more than one of the preceding sections required data qualifiers, the most restrictive qualifier has been added to the data. All sample results that fall below the MRL are assigned the value of the MRL and the "U" qualifier is attached.
The usefulness of qualified data should be treated according to the severity of the qualifier in light of the project's data quality objectives. Should questions arise regarding the data, contact Dana Walker at the Region 10 Laboratory, phone number (360) 871 - 8704.